WKC 3904 RDS

CAR audio

CAR audio

CAR audio

CAR audio

CAR audio

CAR audio

GRUNDIG

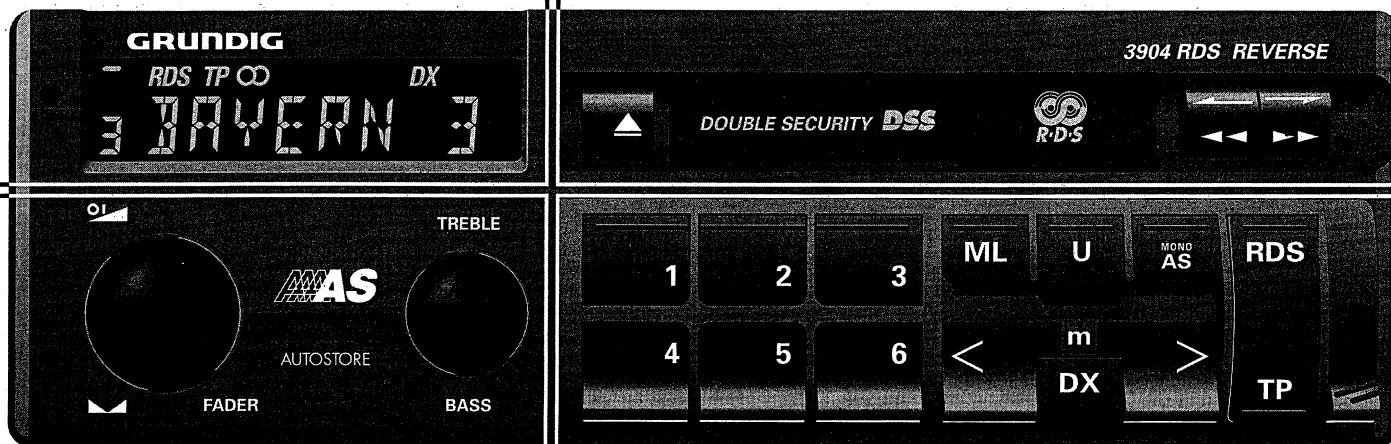
CAR audio

WKC 3904 RDS

English page 22 – 39

Display

Cassette
Registratore
Kasetti
Kassette
Kassett



Verstärker
Amplifier
Amplificateur
Amplificatore
Versterker

Amplificador
Vahvistin
Forstærker
Förstärkare
Forsterker

Radio

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Please note

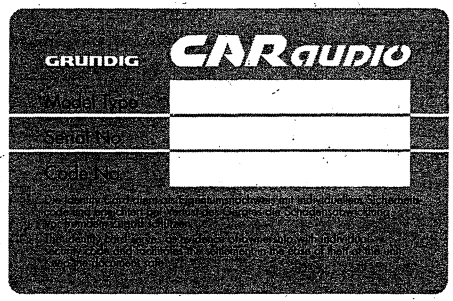
Identity Card

The identification of your unit includes unit type, serial number, and code number.

The serial number is identical to the number stamped inside the unit.

It simplifies a police search in case of a loss of the unit and hastens insurance claim settlement via proof of ownership.

Select the storage place so that the unit is protected from theft.



Radio Data System RDS

A high reception quality is required for the evaluation of RDS signals (qualitatively valuable aerial unit).

Assembling the Unit

This operator's handbook assumes that your car radio was properly installed and connected by the dealer.

If you want to assemble the unit yourself, please note the instructions for **"Assembling and Disassembling"** on pages 37 and 38 as well as the illustrations at the end of the pamphlet.

Traffic Safety

You may endanger yourself and others by excessive volumes.

Therefore, always select the volume so that surrounding noises (e.g. car horns, ambulance and police sirens, etc.) are still audible.

Aerial

The car radio is constructed for connection to a 150 Ω - aerial (impedance).

Aerial cable extensions, e.g. for rear installation, can obstruct reception.

Code Sticker

The **code sticker,** attached behind the windshield for all to see, tells everyone:

This unit is worthless for thieves!

Theft Protection

Coding

Your personal code number is located on the unit identity card.

If you have "activated" the coding of your unit:

As soon as the unit is disconnected from the vehicle's power supply system, (duration plus cl. 30) it is electronically blocked.
Only you can activate it again by entering your personal code number.

Therefore:
Coding "Activating" (see page 34)

Removable Operating Part

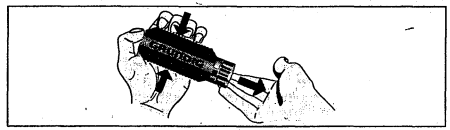
In addition to coding, you can remove the operating part of the unit and take it with you.
In this way, the unit is made worthless for thieves.

Keeping the operating part

Keep the removed operating part in a box and protect it from moisture.

The operating part is fixed in the box.

Lightly press both narrow length sides together to remove the box (see illustration).



If the operating part is lost, you may purchase another one after presenting proof of ownership (e.g. identity card). Contact your dealer.

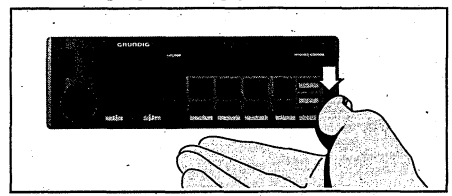
Instructions:

If you remove the operating part while the unit is switched on:

Indicators light up in the unit section, " RADIO ON " flashes in the display and a warning tone sounds.

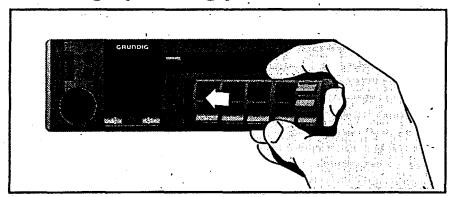
This reminds you that your unit is still switched on(current use).

Removing operating part:



Hold the operating part and press the lock down.
The operating part is released and you can remove it.

Inserting operating part:



First insert the operating part onto the grooves in the unit section left.
Then press on the right side of the operating part until it engages.

Amplifier

Turning the Unit on and Off O|

Off ↺ **On**

Off: no message in display

Turning on and off with the ignition lock, see "Supply voltages" page 38.

Switching over from cassette to radio:

Press button ⏏.

Treble TREBLE

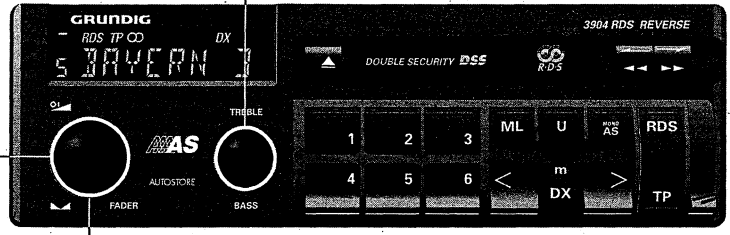
– ↺ +

Bass BASS

– Pull knob and turn:

– ↺ +

– After adjustment lock in knob by pressing.



Volume

softer ↺ **louder**

Relative volumes

left ↔ right

– Pull multifunction control and turn:

right softer ↺ **left softer**

– After adjustment lock in knob by pressing.

Relative volumes FADER

rear ↔ front

– Press multifunction control, than rotate:

front loudspeakers softer ↺ **rear loudspeakers softer**

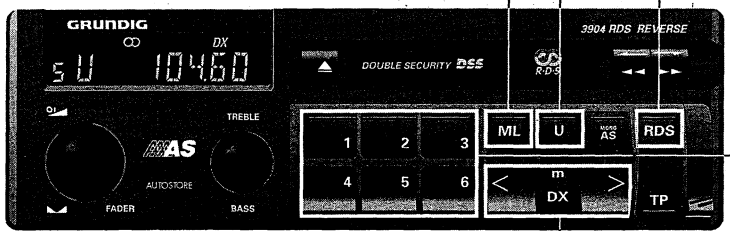
Radio at a Glance

Selecting Range

U – press button:
VHF transmitter

RDS – press button (advance button):
⎺ RDS, ⎓ RDS, ≡ RDS
VHF programmes with RDS
(with and without announcement readiness TP)

ML – press button (advance button):
MW-range or
LW-range



Saving transmitters/programmes

You can occupy each of the stations 1 – 6 with one transmitter/programme each of the range ⎺ **RDS,** ⎓ **RDS,** ≡ **RDS, U, MW** and **LW.**

You can save the announcement readiness TP[1] in the ranges ⎺ RDS, ⎓ RDS and ≡ RDS when receiving an RDS programme with traffic radio.

Before: "Setting transmitters/programmes"

Press the station button until the set transmitter/programme is audible again.

[1] "Announcement readiness TP" see page 33

Setting transmitters/programmes

Before: "select range"

Search

< Frequency –
> Frequency +

Manual

Not possible in RDS ranges.
First press DX button,
until **MAN** is in the display.
then < Frequency –
or > Frequency +

Calling up saved transmitters/programmes

Before: "selecting range"

Shortly press the station button

Radio at a Glance

RDS auto store

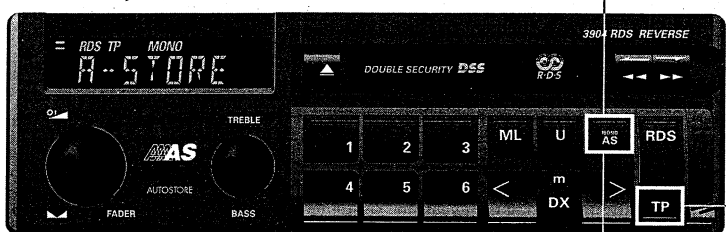
Automatic Programme Memory in 3 RDS ranges

select desired RDS range
(‾ RDS, = RDS, ≡ RDS).

Press button until
A-STORE is in the display.

The six strongest RDS programmes [1] of your reception area are automatically saved on the stations [1] – [6] in the selected RDS range.

[1] when announcement readiness TP is switched on (**TP** in the display) , only RDS programmes with traffic radio.



Stereo ↔ Mono

Manual switching from
Stereo- (CD in the display) to
Mono- (**MONO** in the display)
radio playback.

Shortly press [AS] button, **MONO** in the display. Shortly press [AS] button again, CD in the display.

Announcement Readiness TP

for traffic radio announcements in 3 RDS ranges.

You can switch the announcement readiness on or off with the [TP] button.

Switching on Announcement Readiness:

Press button
TP in the display.

You only receive RDS programmes with traffic radio.

... You can hear traffic radio announcements with a **minimum volume**, also if the volume set with the ◢ multipurpose knob is less.

... **You only hear traffic radio announcements**
if the volume is set on "zero".

... **Automatic Search**
if you leave the reception range of the set RDS programme.

Switching off announcement readiness:

Press button,
TP disappears from display.

Cassette at a Glance

Switching on Cassette Operation

Push cassette into cassette compartment until it engages:

Radio → Cassette

Changing the cassette side

No turning over of cassette – more safety while driving.

– **Press buttons at the same time**
or
– **tape direction is automatically reversed at end of tape.**

▲ in display: upper cassette side

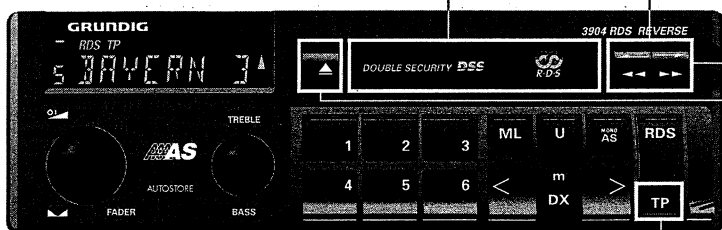
▼ in display: lower cassette side

Fast forward wind and rewind

Lock in appropriate button:

Rewind – ◄◄ ►► – **Forward wind**

To stop fast wind,
– lightly press the released button
or
– tape stops automatically when end is reached.



Traffic Radio Announcement during Cassette Playback

Switch announcement readiness TP[1] on in an RDS range with TP button:

TP in the display.

Cassette playback stops **during traffic radio announcements.**

[1] "Announcement readiness TP" see page 33

Switching off Cassette Operation

Press buttons fully in:

Cassette → Radio

The released cassette can be left in the cassette compartment.

Magnetic tape cassettes are subject to high temperatures in car radio operation.
Therefore, only use faultless and heat-resistant C 60- and C 90-cassettes of well-known manufacturers.

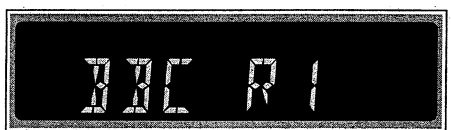
Radio Data System RDS

RDS is an information system whose signals are additionally broadcast from the station to the VHF radio programme.

Programme Service

So you can see what you hear!
If the RDS programme is set, you see the shortened programme names in the display.

Example:
British Broadcasting Corporation – Radio 1



Please note that some "RDS programmes with different regional transmissions" can also have different programme names.

Alternative Frequencies

You select the RDS programme and your car radio sees to it that you receive the set RDS programme of a transmitter easy to receive in the same broadcast chain.
A broadcast chain is comprised of transmitters that broadcast the same RDS programme with different frequencies (alternative frequencies).

Traffic Programme TP

RDS TP in the display shows that the set RDS TP programme regularly transmits traffic radio announcements.

- You can hear traffic radio announcements with a minimum volume, also if the set volume is lower.
- During cassette operation, the tape run stops until the end of the traffic radio announcement.
- If the set RDS TP program can no longer be received, an RDS search begins automatically.

Radio

Reception Conditions

VHF Reception

The reception conditions change constantly while driving.
Mountains, buildings or bridges can disturb reception. This is also true if you are distant from the transmitter.
Therefore, always choose the strongest and/or next transmitter.

Stereo Transmissions

Stereo Transmissions

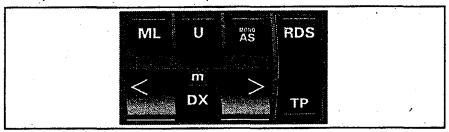
During VHF stereo transmissions:
CD in the display.
If the stereo reception is disturbed, a gliding transition of stereo and mono radio playback ensues.

Manual Switching

of stereo and mono radio playback improves the reception behavior of the car radio for weak transmitters.
AS -shortly press the button:
MONO in the display.
Switching back to stereo radio playback:
AS -shortly press the button.
CD in the display.

Radio

Selecting Range



U Range VHF 87.5 - 108 MHz

"VHF transmitter (frequencies)"

Press [U] button,

U in the display.

RDS Ranges VHF 87.5 - 108 MHz

"RDS programmes with and without traffic radio"

In order to increase the number of stations in the RDS range, your unit has a 3 RDS range at its disposal:

— RDS, = RDS, ≡ RDS

Switch among the RDS ranges with [RDS] button (advance button).

Press [RDS] button:

— **RDS** or
= **RDS** or
≡ **RDS** in the display.

MW Range MW 528 - 1605 kHz

Repeatedly press the [ML] button until

MW appears in the display.

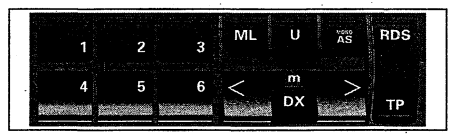
LW Range LW 150 - 283 kHz

Repeatedly press the [ML] button until

LW appears in the display.

Setting programmes with RDS auto store

Automatically save the 6 strongest RDS programmes of your reception area on the stations [1] – [6] in an RDS range.



Saving

that is, newly occupying an RDS range

– for change of location (e.g. on vacation)

or

– the first time you operate the unit.

⚠ Saved programmes are deleted first in this range.

1. [RDS] press the button until the desired RDS range (— RDS, = RDS, ≡ RDS) is displayed.
2. Switch announcement readiness TP on or off. RDS auto store searches only for programmes with traffic radio when the announcement readiness is switched on.
3. Press the [AS] button until

   A-STORE appers in the display.

If the RDS auto store is complete, that is, the selected RDS range is newly occupied, you will hear the RDS programme with the best reception . . .

. . . with traffic radio (**TP** in the display)

. . . with or without traffic radio (**TP** not in the display)

Station [1]:
strongest programme

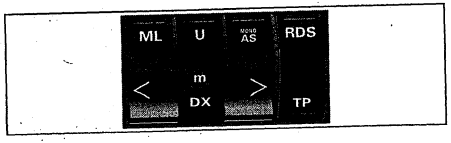
Station [2]:
second strongest programme

etc.

Setting transmitters/programmes

Search or **Manual**

Before: "selecting range"



Search

⊲ for lower frequencies

⊳ for higher frequencies

Automatic switching of the searching sensitivity (3 levels)

Shortly press ⊲ or ⊳ button:

The search stops . . .

- in the first sweep only for extremely well-received transmissions (on the entire frequency range) (short distance reception),
- in the second sweep for all well-received receptions and
- in the third sweep for all receptible transmissions (short and long distance reception); **DX** in the display.

If you want to listen to another broadcast, press the ⊲ button or ⊳ button again. Within ca. 60 seconds in the second or third sweep, since the search sensitivity will otherwise resemble that of the first sweep.

Immediately highest search sensitivity:

Press DX button:
DX appears in display.

The sender search stops at all receptible transmitters (short and long distance reception).

Manual

(not possible in RDS ranges)

Switching from search to manual:

Press DX -button until
MAN appears in display.

⊳ button: frequency higher

⊲ button: frequency lower

Shortly press button:
gradual frequency change.

Press button longer:
fast frequency change.

Switch from manual to search:

Press DX -button until
MAN disappears from display,
or press a station or range button.

Occupying stations

Stations for RDS programmes

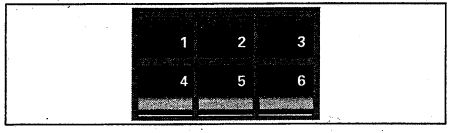
18 × RDS — RDS programmes with and without traffic radio

Stations for Transmitters (frequencies)

6 × U — VHF

6 × MW — mediumwave

6 × LW — longwave



Before: "Selecting range"
"Setting transmitters/programmes"

Switch announcement readiness TP on or off for RDS programmes with announcement readiness TP.

Saving

Press the desired station buttons [1] – [6] until, following a short silent switching time, the set transmitter is audible again.
The selectea status of the announcement readiness (TP ON or OFF) is taken over when saved.

The transmitter or the programme is saved. A transmitter/programme of the same range previously saved there is erased.

The memory contents remain even after shutting off the operating voltage.

Callin up stations

Before: "Selecting range"

You hear the programme or transmitter last set in this range (last station memory). The announcement readiness TP is switched on or off according to the previous storage.
If the set RDS programme can no longer be received with sufficient RDS quality, the RDS search starts automatically.
During the search:

SEARCH appears in display.

Calling Up

Press the desired station button [1] – [6].

You will see displayed . . .

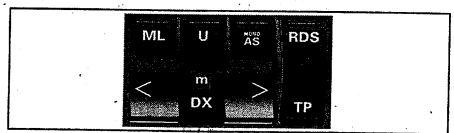
. . . in the RDS ranges
the programme names, the selected RDS range, TP (if saved) and the number of the station button.

. . . in the U-, MW- and LW-ranges
the reception frequency, the wave range and the number of the station button.

Announcement Readiness TP

for Traffic Radio Announcements

TP = Traffic Programme (traffic radio)
In the ranges ⁻ RDS, = RDS and ≡ RDS, you can switch the announcement readiness on or off with the TP button when receiving an RDS programme with traffic radio.



Switching on announcement readiness TP

Press TP button:

TP appears in display.

RDS programmes with traffic radio are received.

If the set programme is not a traffic radio programme, the search starts automatically.

Minimum Volume

You can hear traffic radio announcements with a minimum volume, even if the volume set with the multi-purpose knob is lower.

Only Traffic Radio Announcements

If you only want to hear traffic radio announcements, turn the multi-purpose knob to the left.

RDS TP Search

If the set RDS TP programme can no longer be received with sufficient RDS quality, the RDS TP search starts automatically.
During the search:

SEARCH appears in display.

The car radio searches for another RDS TP programme.
If you want to continue listening to the previous programme, you can interrupt the automatic RDS TP search.

While SEARCH is displayed,
Shortly press U button.

The transmitter last listened to (frequency) is taken over into the U range and is intermediately saved here.
The car radio no longer searches for another RDS TP programme.

Switching off RDS TP Search

If you want to avoid the RDS TP search, switch off announcement readiness TP.

No Reception

If no RDS TP programme can be received, switch off announcement readiness TP.

Switching off Announcement Readiness TP

Press TP button:

TP disappears from display.

Radio

Display Messages

Possible messages in the lower range of the display . . .

A-STORE	an RDS range is occupied anew.
SEARCH	RDS searches for a new programme.
BBC R1	RDS programme (BBC – first programme)
104.60	reception frequency z.B. 104,6 Megahertz
U	U range
MW	MW range
LW	LW range
5	station, e.g. [5]

Possible messages in the upper range of the display . . .

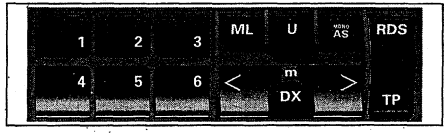
☰	e.g. third RDS range level
RDS	RDS programme with/without traffic radio
TP	RDS programme with traffic radio
∞	for stereo transmissions
MONO	mono radio playback after switching manually
MAN	manual transmitter Sender/ programme setting
DX	distant reception – highest search sensitivity

Coding

General information about coding, see page 24.

Coding is not activated from the factory.

If the identity card and the code number are lost, only the Grundig dealer, upon payment and proof of ownership, can operate the unit again at the factory.



Activating

1. Radio plays.
2. Press [U] button longer than 3 seconds:
   CODE appears in display.
   After ca. 3 seconds:
   I - - - appears in display.
3. Enter code-No. (see identity card) with the buttons [1] – [4], press buttons again.

Coding

Example: 1658

	Display:
[1] button don't press	1 - - -
[2] button press 6 ×	1 6 - -
[3] button press 5 ×	1 6 5 -
[4] button press 8 ×	1 6 5 8

Example: 0703

	Display:
[1] button press 1 ×	0 - - -
[2] button press 7 ×	0 7 - -
[3] button press 10 ×	0 7 0 -
[4] button press 3 ×	0 7 0 3

In case of an incorrect entry, reenter code no.

4. Confirm code no.
   Press [U] button longer than 3 seconds:
   SAFE appears in display.
   After ca. 3 seconds:
   radio plays.
   The coding is activated.

Coding Activated?

1. Radio plays.
2. Press [U] button longer than 3 seconds:

a) **Coding is activated** if
   SAFE appears in display.
   After ca. 3 seconds:
   1 - - - appears in display.
   Switch unit OFF/ON:
   Radio plays.

b) **Coding is not activated** if
   CODE appears in the display.
   After ca. 3 seconds:
   1 - - - appears in the display.
   Switch unit OFF/ON:
   Radio plays.

Restarting

Of the "activated" unit after it was disconnected from the operating voltage of your vehicle (e.g. workshop).

1. Attach the unit to operating voltage.
2. Waiting times are provided between trials so that your unit can't be restarted with "test".
   It is recommended that you allow the dealer to restart the unit after the sixth attempt.
   The following table shows the waiting times "between" the single attempts.

Trial	* in display	Waiting time ca.
1		
2	1	21 sec.
3	2	1.5 min.
4	3	5.5 min.
5	4	22 min.
6	5	1.5 hrs.
7	6	6 hrs.
8	7	24 hrs.

* Trial no. 1 to 7 left of the code no.

→

Coding

The unit is blocked for all entries during these times:

SAFE appears in display.

After the seventh attempt, always 24 hours waiting time.

3. Switch on unit with multi-purpose knob **01**:

SAFE appears in display.

After ca. 3 seconds:

1 - - - appears in display.

4. Enter code no. (see identity card) with the buttons [1] – [4], press the buttons again.

Example: 1658	Display:
[1] button don't press	1 - - -
[2] button press 6 ×	1 6 - -
[3] button press 5 ×	1 6 5 -
[4] button press 8 ×	1 6 5 8

In case of an incorrect entry, reenter the code no.

5. Confirm code no.

Press [U] button longer than 3 seconds :

SAFE appears in display.

After ca. 3 seconds:

Radio plays.

Enter incorrect code no.:

SAFE appears in display, radio doesn't play.

Start again. Note the waiting times **between** the trials.

The waiting time ends if the number of the next trial appears in the display, e.g. 1.

Deactivating

e.g. cancel the "activation" when disassembling the unit.

1. Radio plays.
2. Press [U] button longer than 3 seconds:

SAFE appears in display.

After ca. 3 seconds:

1 - - - appears in display.

3. Enter code no. (see identity card) with the buttons [1] – [4], press the buttons again.

Example: 1658	Display:
[1] don't press button	1 - - -
[2] button press 6 ×	1 6 - -
[3] button press 5 ×	1 6 5 -
[4] button press 8 ×	1 6 5 8

In case of an incorrect entry, reenter the code no.

4. Confirm code no.

Press [U] button longer than 3 seconds:

CODE appears in display.

After ca. 3 seconds: radio plays.

Enter incorrect code no.:

SAFE appears in display, radio doesn't play.

Start again. Note the waiting times **between** the trials.

The waiting time is concluded when the number of the next attempt, e.g. 1, appears in the display.

Service and Care

The total assembly of the unit guarantees trouble-free operation over a long period of time. Should trouble nevertheless occur, please contact your dealer.

If desired, your dealer in the Federal Republic of Germany, as a service of Grundig, can substitute car radios with factory tested replacement units in case of a defect.

Please note however that the prerequisite for the participation of your dealer in this replacement programme is the copy of a properly completed identification document and a guarantee stamp on the unit which has not been tampered with.

Don't expose the cassettes to higher temperatures (see manufacturer specifications) and return them to their cases after use.

Only clean the screen with a soft, dust-gathering antistatic cloth. Polishing and cleaning agents could damage the surface of the display.

The tone knob must be free of band wear to avoid losses in the treble playback. Therefore, you should clean the tone knob with a cleansing cassette every 50...100 operating hours.

Assembly & Disassembly

Assembly Material and Accessories

See the list "Grundig car radio accessories" to find out which assembly materials you need and which accessories are available.

The illustrations [1] – [4] for the text are located at the end of the pamphlet.

Setting Assembly Frames

Illustration [4]

- Set assembly frames **b** in the unit section **a** of the vehicle.
- Bend the mounting tabs **c** behind the unit section **a** as needed (according to vehicle type).

Connecting aerial

Illustration [1] ***and*** [2]

- Use the aerial adapter if necessary (Ill. [1]).
- Fix the aerial adapter (Ill. [1]) or aerial cable (Ill. [2]) in the plastic support.

Assembly and Disassembly

Supply Voltages

Knife contacts A: 4, 5, 7 and 8

Illustration [3]

A 4/A 7 + 12 V operating voltage

If you want to switch the car radio on or off with the ignition lock:*
Connect knife contact **A 7** to **clamp 15** of the vehicle. You must then connect the knife contact **A 4** to the **clamp 30**.

*If you do **not** want to connect the car radio via the ignition lock:*
Connect knife contact **A 7** to **clamp 30** of the vehicle. The knife contact **A 4** doesn't need to be connected.

* Switching the car radio on and off with the ignition lock is not possible for vehicles from the companies VW/Audi after model year 1991. Never connect knife contact **A 7** to the S contact (supply plug PIN 4 – cable brown/red) of the vehicle!

A 5 + 12 V control voltage max. 1 A

For automatic aerials (extend/retract), service amplifiers (switch on/off) etc. and operating voltage for aerial amplifiers.

A 8 – operating voltage

Connect to **clamp 31** (mass) of the vehicle.

Loudspeakers

Knife contact B: 1 to 8

Illustration [3]

Maximum Output

– 4 x 4 Ω:	
Peak	4 x 10 W
Sine, DIN 45324	4 x 5 W
– 2 x 4 Ω:	
Peak	2 x 12 W
Sine, DIN 45324	2 x 6 W

Front loudspeaker		Rear loudspeaker	
B 3	right +	**B 1**	right +
B 4	right –	**B 2**	right –
B 5	left +	**B 7**	left +
B 6	left –	**B 8**	left –

Fuse

Illustration [3]

Fuse 5 A (plugged).

Inserting Unit

Illustration [4]

– Insert the unit into the assembly frame **b** until it catches.

Removing Unit

Illustration [4]

– Insert both straps **d** into the opening of the screen and push them in until they catch.
– Press both straps outward ↔ and slowly pull out the unit.

Technical and optical changes reserved!

WKC 3904 RDS